

# NASA'S SCIENCE SUPPORT OFFICE

## 2019 ANNUAL REPORT

NASA'S SCIENCE  
SUPPORT OFFICE  
MISSION HANDS-ON  
BROCHURES ACTIVITIES  
PUBLIC ENGAGEMENT  
EVENTS  
DYNAMIC  
PLANET  
TWITTER  
ECLIPSE  
MISSION  
SUPPORT  
UNDERSTANDING SCIENTIFIC DAY  
EARTH MEETINGS  
OUTREACH  
SCIENCE STORIES  
SCIENTISTS  
DELIVERING  
NASA SCIENCE  
FACE-TO-FACE  
TO THE WORLD  
EXHIBIT EARTH  
HYPERWALL  
CONGRESSIONAL  
EDUCATORS

# Our Mission

## Bringing NASA Science Face-to-Face to the World

With nearly 30 years of history and experience, NASA's Science Support Office has established a well-deserved reputation as the primary point of contact for the Science Mission Directorate and Earth Science Division for science exhibit outreach and product development. The office brings together a unique skill set in “one team” that enables it to plan, organize, develop, design, and deliver successful execution of small- and large-scale exhibit-support services.



## Our Vision

The Science Support Office strives to provide an inspiring and interactive venue, using a unique storytelling approach, that allows a variety of audiences worldwide to connect with NASA Science, offering:

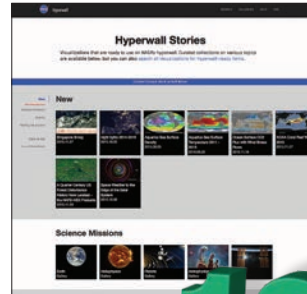
- opportunities for individuals to engage face-to-face with NASA scientists, engineers, modelers, and outreach personnel alike (e.g., via dynamic scientific presentations and demonstrations);
- access to free and accurate scientific information related to a variety of interesting NASA missions, research topics, and scientific discoveries (e.g., science story booklets, mission brochures, *The Earth Observer* newsletter); and
- unique visual scientific perspectives by way of stunning imagery and other creative multimedia content (e.g., Hyperwall, Dynamic Planet).



# The Year in Numbers



**17**  
professional  
society  
meetings



**12**  
new  
science  
stories

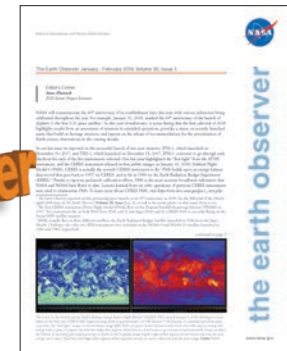


**3**  
public  
events



**12**  
domestic  
scientific  
conferences

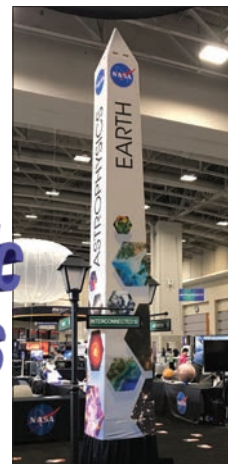
**6**  
newsletter  
issues



**5**  
international  
conferences



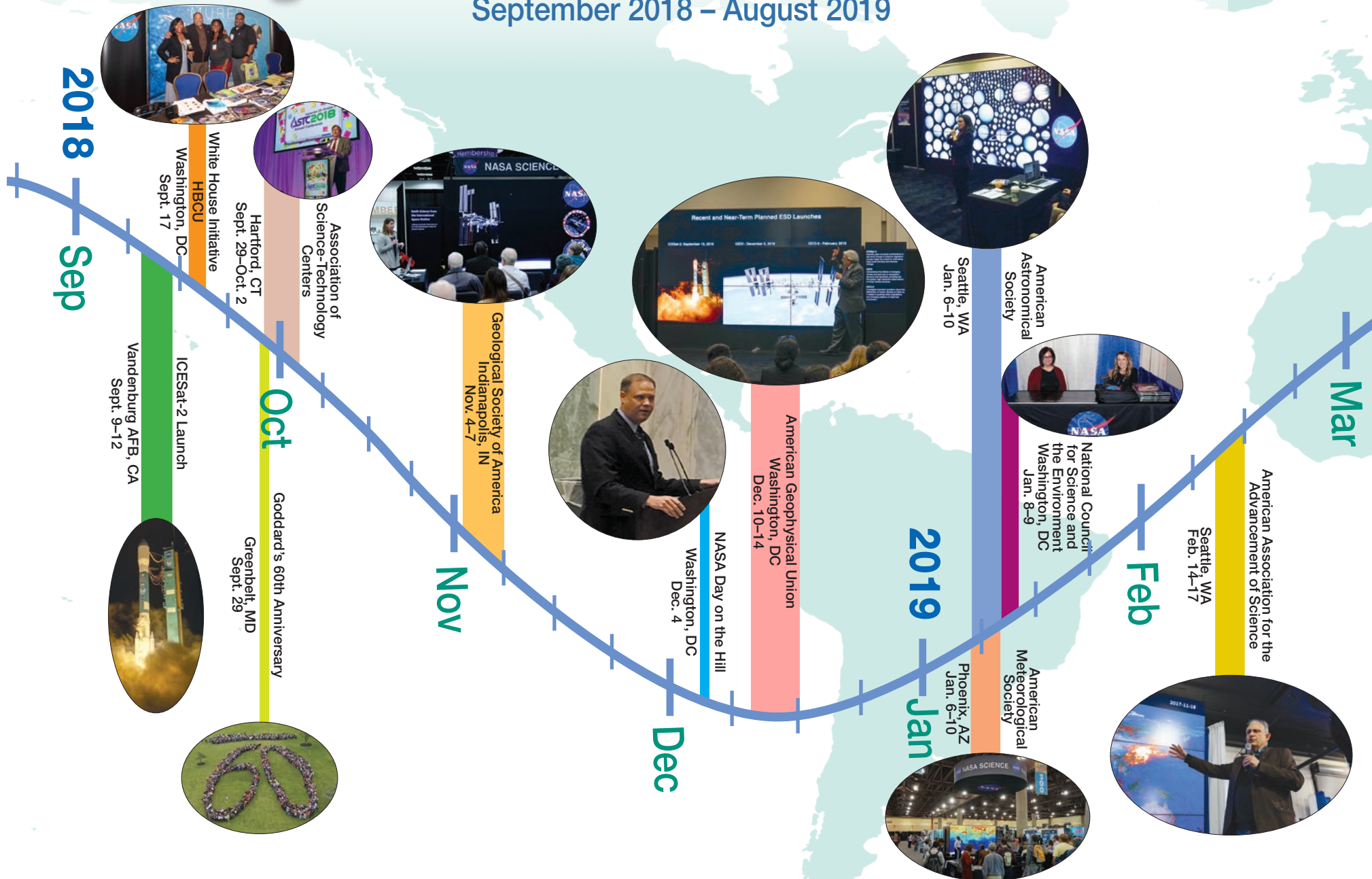
**5**  
thematic  
exhibits



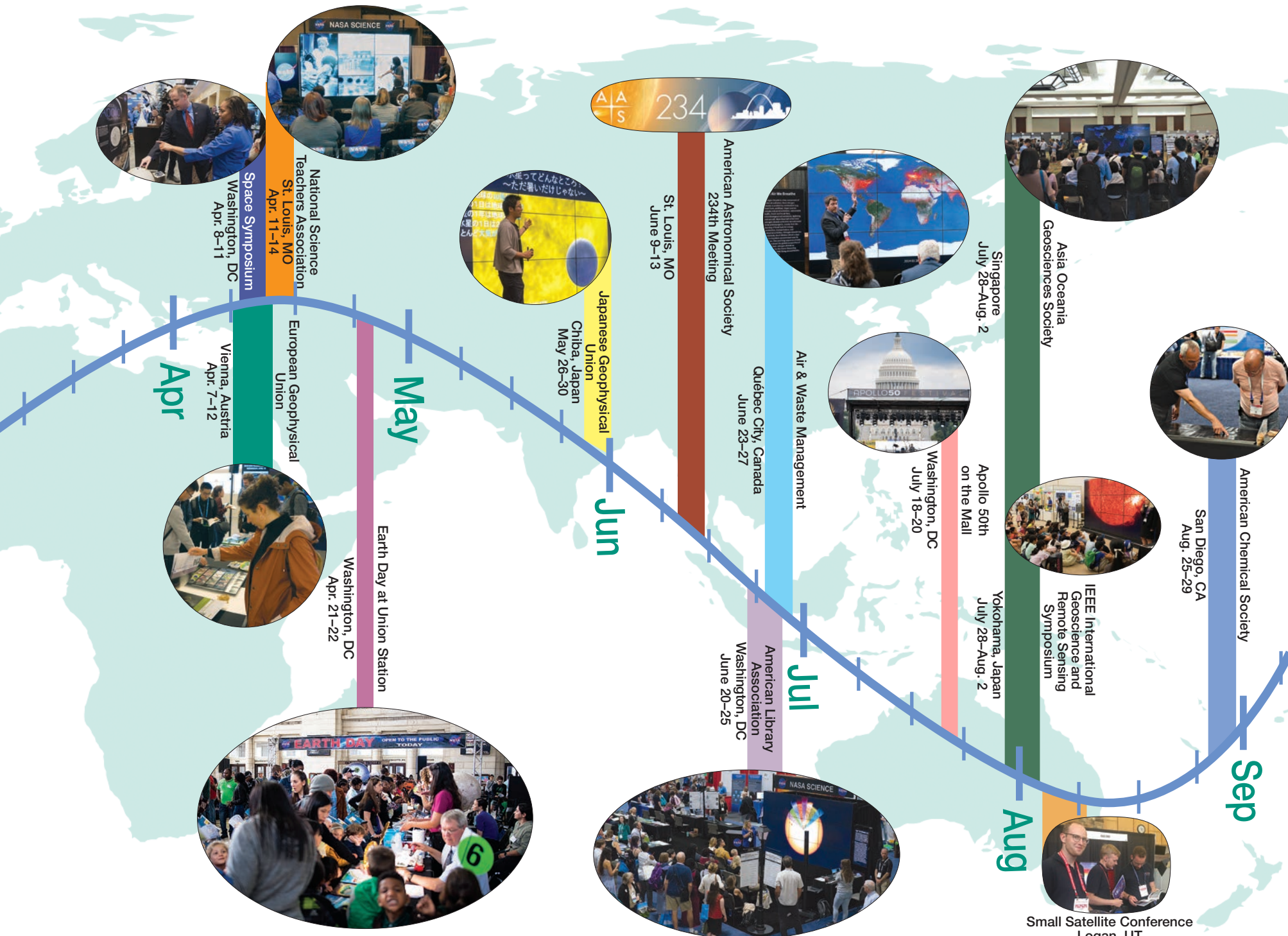
**9**  
brochures  
booklets  
programs

# Taking NASA Science Around the World

September 2018 – August 2019







# Science Visualizations We Made

One of the most popular means of communication at NASA exhibits in recent years is a testament to the innovation of the Science Support Office and its commitment to remain on the cutting edge of communications technologies. The Hyperwall is a video wall capable of displaying multiple high-definition data visualizations and/or images simultaneously across an arrangement of screens. When this technology was emerging, the office staff saw potential for a new approach to storytelling at their exhibits. The Hyperwall made its debut in 2011 and immediately added a whole new dimension to NASA exhibits and is now immensely popular.

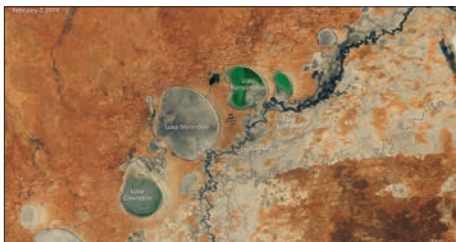
For many of the meetings where the Hyperwall is used, the Science Support Office recruits a line-up of speakers to help explain phenomena, ideas, or examples of world change; the staff provide technical support, helping presenters prepare the material they wish to share in formats appropriate for the Hyperwall. Many of the existing Hyperwall stories reveal change across space and time, while others display large-scale still images; all visuals are accompanied by descriptive, storytelling captions.



## The Padma River

Landsat satellites show the changes to the shape and width of the Padma River in Bangladesh since 1988. Each twist and zigzag tells a different geologic story about the river—often tied to erosion.

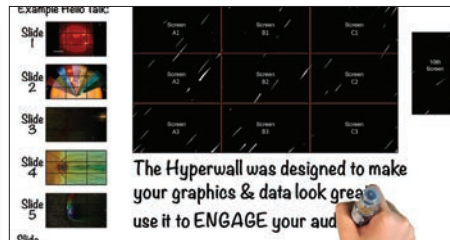
[svs.gsfc.nasa.gov/31022](https://svs.gsfc.nasa.gov/31022)



## Australia's Disappearing Lakes

The Menindee Lakes of New South Wales were nearly brimming with water in December 2016. These satellite images show the dwindling water levels of the lakes on January 27, 2017, February 15, 2018, and February 2, 2019.

[svs.gsfc.nasa.gov/31033](https://svs.gsfc.nasa.gov/31033)



## How to Put Together a Hyperwall Talk

This video will walk you through the process, even if you're completely new to "the wall." File specifications as well as useful tips and tricks are covered.

[svs.gsfc.nasa.gov/30993](https://svs.gsfc.nasa.gov/30993)



## Shanghai Growth from the International Space Station

Nighttime photographs taken by astronauts aboard the International Space Station reveal the unprecedented growth of Shanghai between 2003 and 2018.

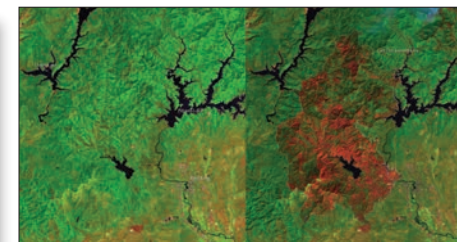
[svs.gsfc.nasa.gov/31029](https://svs.gsfc.nasa.gov/31029)



## Peru's Shrinking Tropical Ice Caps

Landsat images with no cloud cover and little to no snow allows visualization of the ice area losses and the exposure of bare ice at the lowest elevations of both ice caps between 1975 and 2017.

[svs.gsfc.nasa.gov/31014](https://svs.gsfc.nasa.gov/31014)

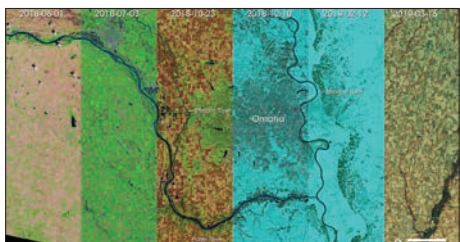


## Carr Fire

Landsat acquired views of Northern California shortly before and near the end of the devastating Carr Fire, which burned more than 200,000 acres.

[svs.gsfc.nasa.gov/30997](https://svs.gsfc.nasa.gov/30997)

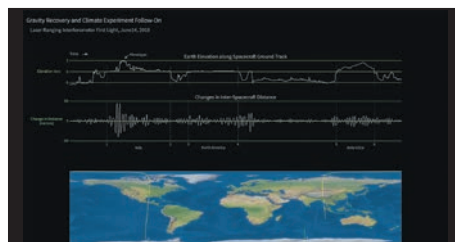




### Historic Floods Inundate Nebraska

Animations of a series of Landsat 8 images from June 2018 to March 2019 shows the seasonal progression around Omaha, Nebraska.

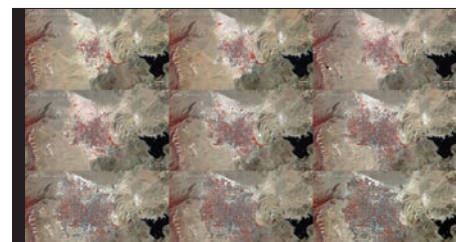
[svs.gsfc.nasa.gov/31032](https://svs.gsfc.nasa.gov/31032)



### GRACE Follow-On Mission First Light

These images show the first data from the Microwave Ranging Instrument and the Laser Ranging Interferometer (LRI) instrument onboard GRACE-FO.

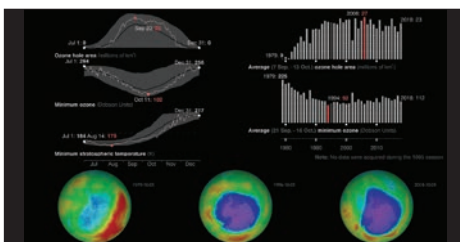
[svs.gsfc.nasa.gov/30996](https://svs.gsfc.nasa.gov/30996)



### Urban Growth in Las Vegas - Update

False-color images show the rapid urbanization of Las Vegas between 1984 and 2018.

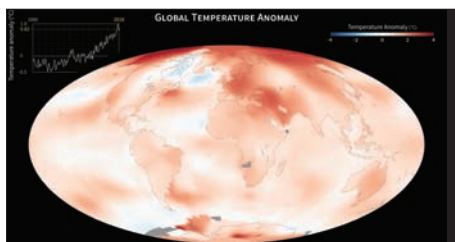
[svs.gsfc.nasa.gov/30215](https://svs.gsfc.nasa.gov/30215)



### Ozonewatch 2018

Plots showing the status and size of Earth's ozone hole over Antarctica for 2018.

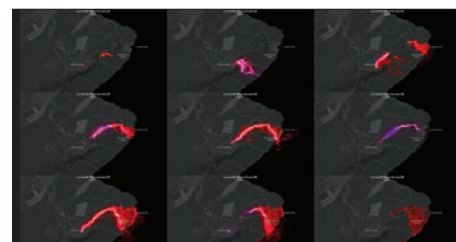
[svs.gsfc.nasa.gov/30985](https://svs.gsfc.nasa.gov/30985)



### Long-Term Global Warming Trend, 2018 Update

This map shows global, annual temperature anomalies from 1880 to 2018 based on analysis conducted by NASA's Goddard Institute for Space Studies (GISS).

[svs.gsfc.nasa.gov/31028](https://svs.gsfc.nasa.gov/31028)



### Nighttime Views of the 2018 Kilauea Eruption

Images of Landsat 8 truecolor and nighttime imagery shows the progression of the East Rift Zone eruption.

[svs.gsfc.nasa.gov/30977](https://svs.gsfc.nasa.gov/30977)

# Our Products

Like a seasoned storyteller, the Science Support Office possesses the necessary skills and expertise to tailor a story (or message) to a specific audience. The office plans and custom-designs the exhibit-space for each event it supports, and develops and delivers content that will most effectively communicate its message to the audience that will be attending that event.

## Earth at Night Coffee Table Book



## 2019 NASA Science Calendar



## Understanding Earth Booklets & iBooks

*The Journey of Dust*

*Biomass Burning*

*The Icy Arctic*

*Biodiversity & Ecological  
Forecasting*

*Our Ocean*

*What's Up with Precipitation?*



## Mission Support

GRACE-FO Mission Brochure

ICESat-2 Mission Brochure

PACE Brochure Series

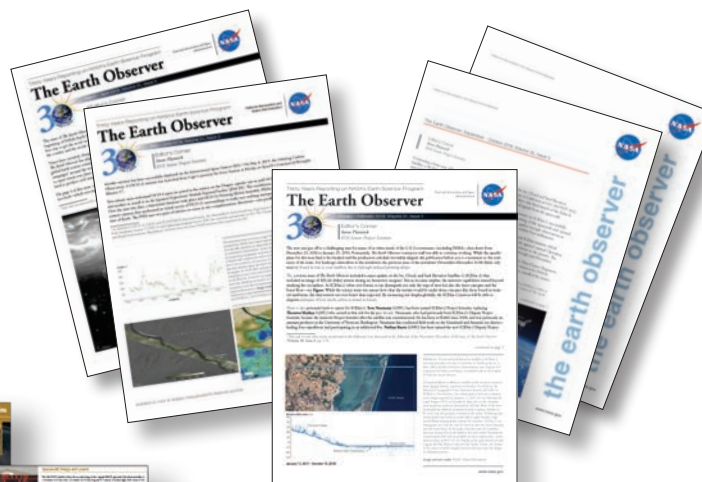
GRACE-FO iBook

ICESat-2 iBook



## The Earth Observer Newsletter (30 Years Running!)

[eosps.nasa.gov/earth-observer-archive](http://eosps.nasa.gov/earth-observer-archive)



## Find Us on the Web

Twitter: Follow us @NASAHyperwall

Flickr: [www.flickr.com/photos/eosps/sets](http://www.flickr.com/photos/eosps/sets)

Hyperwall Catalog: [svs.gsfc.nasa.gov/hw](http://svs.gsfc.nasa.gov/hw)

NASA's Earth Observing System: [eosps.nasa.gov](http://eosps.nasa.gov)



## Customized Hyperwall Graphics



## Thematic Exhibits



## Z-Cards

*What Color is the Ocean?*  
*Science Resources*

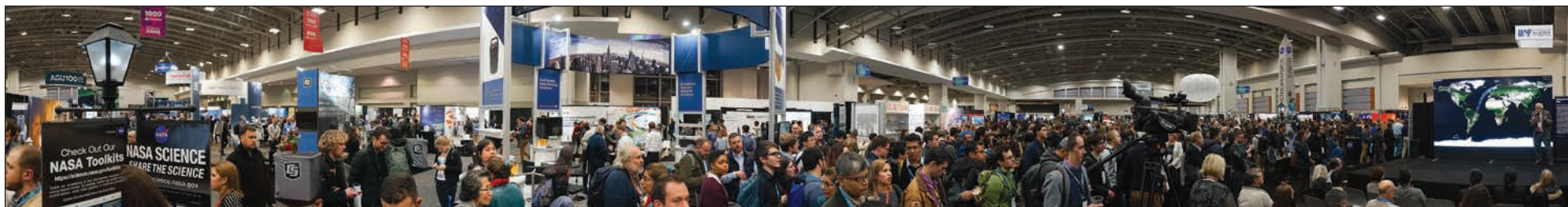
## Event Support: Displays, Posters, and Booklets

*NASA Events Program Booklet*  
*Hyperwall Science Stories Posters*  
*Schedule of Events Posters*  
*Conference Program Ads & Posters*  
*Earth Day Activity Passport*  
*Lunar Quizzes for Public Events*





# Upcoming Events



Looking ahead, the Science Support Office will continue to develop innovative products and integrate new technologies into its exhibits, while continuing to maintain existing connections within the Science Mission Directorate and Earth Science Division. This will involve a full slate of conferences to attend as well as development of exhibits, print products, and Hyperwall content to support

these events. As the office does so, they will also seek opportunities to establish new connections and further develop interagency and international collaborations.

The Science Support Office has identified a list of upcoming conferences and events to attend in the 2019–2020 time frame. These include:

- **Science Day on the Hill**  
Washington, D.C.: September 2019
- **OceanObs'19**  
Honolulu, Hawaii: September 16–20, 2019
- **Association of Science Technology Conference**  
Toronto, Canada: September 21–24, 2019
- **Geological Society of America Annual Meeting**  
Phoenix, Arizona: September 22–25, 2019
- **38th ISRSE/Pecora 21 Joint Conference**  
Baltimore, Maryland: October 6–11, 2019
- **International Astronautical Congress**  
Washington, D.C.: October 21–25, 2019
- **American Geophysical Union Centennial Meeting**  
San Francisco, California: December 9–13, 2019
- **American Astronomical Society Annual Meeting**  
Honolulu, Hawaii: January 5–9, 2020
- **American Meteorological Society Centennial Meeting**  
Boston, Massachusetts: January 12–16, 2020
- **American Association for the Advancement of Science Annual Meeting**  
Seattle, Washington: February 13–16, 2020
- **Ocean Sciences Meeting**  
San Diego, California: February 16–21, 2020
- **National Science Teachers Association National Conference**  
Boston, Massachusetts: April 2–5, 2020
- **European Geosciences Union General Assembly**  
Vienna, Austria: May 3–8, 2020
- **Earth Day 50th Anniversary at Union Station**  
Washington, D.C.: April 21–22, 2020
- **Maryland Library Association and Delaware Library Association Joint Conference**  
Cambridge, Maryland: May 6–8, 2020
- **Japan Geoscience Union Meeting**  
Chiba, Japan: May 24–28, 2020
- **American Library Association Annual Conference**  
Chicago, Illinois: June 25–30, 2020
- **Asia Oceania Geosciences Society Meeting**  
Gangwon-do, South Korea: June 28–July 4, 2020
- **IEEE International Geoscience and Remote Sensing Society**  
Waikoloa, Hawaii: July 19–July 24, 2020
- **260<sup>th</sup> American Chemical Society Annual Meeting**  
San Francisco, California: August 16–20, 2020



# Thank you!

The Science Support Office staff wishes to extend their sincere thanks to everyone who contributed to this year's exhibit activities and content development.

Together  
Everyone  
Achieves  
More

*"Coming together is a beginning. Keeping together is progress. Working together is success." —Henry Ford*

*"It is amazing how much you can accomplish when it doesn't matter who gets the credit." —Robert Yates*



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**Kevin Miller**  
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